siderable Decreases in Mi Kansas and an Increase in Nebraska. KANSAS CITY, Mo., July 24.-Bradstreet's reports for the first six months of the present year show some surprising and encouraging facts for Kansas and Missouri. Mr. Halbert Houghton, superintendent of Bradstreet's agency in this city, was struck by the figures shown by a comparison of the business failures in different states in 1891 with the failures in 1890. The number of failures, Mr. Houghton says, is unquestionably a true index of the stability and prosperity of a state. Few failures mean good crops, good prices and general confidence. Many failures mean just the opposite.

The remarkable feature in the comparison of Kansas and Missouri with other states in the matter of increase or decrease of failures is that these two states not only show up better than those further east or north, but make a much better showing than the other western states.

For the first six months of 1891 Missouri had 150 failures against 210 for the corresponding period in 1890. This was a decrease of 25 per cent. In other words there were one-fourth more failures in the first six months of 1890 than in 1891. In Kansas there were 173 failures in 1890 and 160 in 1891. Here is also a good decrease of misfortune. Nebraska shows up on the other side of the line. In 1890 there were 188 failures and in 1891 there were 283. All these figures are for the first six months of the year mentioned. Nebraska, therefore, shows an increase of over 100 per cent in the number of failures. These figures are given without a comparison of the number of business houses in the several states, but when it is remembered that Missouri has 45,-600 names, Kansas 25,700 and Nebraska 19.400 it is seen that the proportion of sucessful business enterprises is still greater in Kansas and Missouri. Texas, with her 28,800 names, had 252 failures in 1891 and 179 in 1890, showing a big increase in that state also. Colorado had 95 failures in 1891, against 86 failures in 1890. Iowa had 129 in 1891 against 118 in 1890. Utah had 34 in 1891 and 8 in 1890.

### MUST BE OBEYED.

The Supreme Court of Kansas Shows That It Is Superior to a District Court and Its Mandates Must Be Obeyed.

TOPEKA, Kan., July 24.—Chief Justice Horton and Associate Judges Valentine and Johnson, severely reprimanded G.W. McKay, the Harper county alliance judge, yesterday afternoon, placed him on his good behavior and continued the case against him for contempt until September, when, if he does not further interfere with the or ders of the supreme court he will be permitted to go without punishment.

A. M. Mackey, one of the attorneys for the state in the Botkin impeachment trial, appeared for the defendant, Martin C. Keeler, whom Judge McKay desired to retain, declining to act. He attempted to justify Judge McKay by quoting an old statute for his authority for taking the course in direct opposition to the orders issued by the supreme court.

Chief Justice Horton destroyed this by citing a decision of the supreme court, which held that the statute relied upon did not apply to cases of the character of the one under considera-Judge Horton then announced that

the court had reached a decision. He said: "Acting on the theory that Judge McKay issued his orders in good faith the proceedings in the case of contempt ptember term of this court. Judge McKay can protect the property in the hands of the receiver and money realized from the sale of any of it be taken charge of by but he can not turn it over to the guardian or the probate court. If this order is obeyed this matter can be settled with little difficulty, but if there is an intimation that it is being disobeyed the defendants will understand that the supreme court of Kansas has power to punish, no matter whether the party is district judge, guardian or other person. Court is now adjourned."

# TO HOLD THE WHEAT.

The Farmers' Alliance Sald to Be Engineer

ing a Vast Scheme. Sr. PAUL, Minn., July 24.-St. Paul has been made the headquarters of a national movement by the United Farmers' Alliance of the country to corner the entire wheat crop of the United States. At No. 317 Wabash street for several days a large force of employes has been engaged in sending out circulars with the view of having not only the alliance men of the United States. but all classes of farmers, keep back their wheat crop until the bears have all been killed off and prices have been advanced to a high point. In other words, the alliance press bureau, the reform press bureau and state press bureau are working together, endeavoring to unite farmers of the United States in a gigantic wheat trust in which the pro ducers shall be the stockholders and by which the speculators and wheat buy-

ers will be squeezed to the wall. At the head of the movement, which has its headquarters in St. Paul, is George M. Muller, editor of the State. and a prominent alliance man. A circular reciting the benefits of combination and urging the formation of the "trust" has been made public.

Found to Be Color-Blind.

WASHINGTON, July 24.-Lieut John F. Meiggs, of the United States navy, son of the old quartermaster-general, is to be retired. He stands acceedingly well as an expert in ordnauce matters, and was recently ordered before a board to be examined for promotion Then, strange to tell, a discovery was made which showed that he was tech-nically disqualified to remain in the service. He was color-blind. This was unknown to himself as well as to the department. He has been in the navy twenty-nine years, thirteen of them at sea, and never felt the defect in his

## ALLIANCE ADDRESS.

The Executive Committee of the People's

MILWAUKEE, July 23 .- The addre of the national executive committee of the people's party has been sent out by Secretary Schilling. It starts out with the information that the times which try men's souls are here once more. The descendants of British tories and other European and American capitalists have "bound the country in chains." The declaration of independence from British arrogance needs to be supplemented by a declaration of indepe ence from the power of concentrated wealth; the political independence gained by the revolutionists is but a sham unless our country can secure industrial independence.

The address enlarges on the subtle power of money to oppress the poor and then declares the railroads of the country are capitalized at \$9,000,000,000, and the great majority of their stock is held by people in England and other foreign countries who have no more interest in the United States than the vampire has in its victim.

At a reasonable investment foreigners have invested \$10,000,000,000 in our country. What value have they given us in return? They did not give us gold or silver because these metals have been carried abroad by the ship load and are mined here, not in Europe. To get this valuable property these foreigners have merely loaned us their credit in bank checks, drafts and notes, and they are paying these with the dividends they draw from our people.

Comparing the foreign car tal invested here with the total wealth of the country the address says that reckoned at compound interest the former will reach the amount represented by the latter in less than twelve years. The statement is made that the Western Union Telegraph Co. is capitalized at \$90,000,000 and makes 5 per cent., but that its plant could be duplicated with \$15,000,000, showing that the actual rate of interest is 30 per cent., and that the same applies to many other corpor-

The policy of the government in paying high premiums for money to take up bonds not due, so as to dispose of the accumulation of the treasury, is denounced, and reference is made to the inability of the treasury department to redeem \$50,000,000 of 41/2 per cents about

The address states that the treasury contains \$750,000,000, but that the bankers who control the department fear the release of \$50,000,000 would break down the money market and ease the grip that unproductive capital has upon the country.
"If the billions of dollars of bank

and corporation paper, mortgages and other evidences of debt issued by individuals are good enough for the extortioners and the usurers, paper notes issued by all the people jointly in the form of government notes are better."

The address then calls for the control of the telegraph by the people the same as the postal system, and says the people's party does not propose to stop at the reform proposed in the platform, as it is a progressive organization.

# INGALLS' POSITION.

The Ex-Senator Declares Emphatically That He Belongs to the Republican Party.

ATCHISON, Kan., July 23.-Ex-Senstor John J. Ingalls has addressed the following letter to the Manhattan quiry about the authenticity of an inclosed quotation imputed to him: "Absence from home will explain and I days. trust excuse the delay of my reply to will be continued till the first day of yours of the 1st inst. The quotation is not mine. I am, as I have been from the birth of the party, a republican.

"It is not a perfect political organization, but it is the best there is or has a low estimate. been or will be till the sheep and the has had some bad men, but it is recorded of the twelve Peterdenied his Master and Judas betrayed Him. It has committed errors and made mistakes, but nothing human is exempt from infirm-

"No other party in this or any other country in the present or a previous age has ever exerted influence so enormous and so beneficial upon the essential nature of the government and the destiny of mankind. It is the custodian of the political and social ideas for which the exiles of Jamestown and Plymouth sought a new world, wrote the declaration of independence and built upon the foundation stones of liberty, justice and equality, the sovereignty of the people and the brotherhood of man. It represents now, as heretofore, the conscience, the courage and the conviction of American citizens, represents social order, progress, individual growth and national glory as opposed to the frenzied vertigoes of anarchy and the emasculated reveries of paternalism on whatever pretext they may be supported, whatever disguise they may assume, whatever masks they may

"Every age has its duties. The old issues have disappeared. New questions are presented, arising from the unequal distribution of the burdens, the benefits and the privileges of society. That these will be considered and adjusted by the republican party, as it has hitherto dealt with slavery, polygamy, secession, reconstruction the currency and the tariff, I am confident. To doubt this would be to deny the logic of history and to disparage the intelligence and patriotism of the people."

Father of Nebraska Dead.

PLATTSMOUTH, Neb., July 23.-Jerry Hutchinson died yesterday aged 83. He was a member of the famous Rock Bluffs election board when Nebraska was admitted as a state. He thoughtlessly took the ballot box home with him when he went to dinner on election day, and that action was the basis of a note: contest. It was found that if Rock Bluffs was counted the new constitution would be defeated and Nebraska remain a territory. Willet Pollenger, an able lawyer, succeeded in having the Rock Bluffs totals thrown out, thus adopting the constitution, which re-sulted in the admission of the state.

## WAGES, FIFTEEN MILLIONS.

At Least That Much Yearly to Workman Directly Employed—Counting Those En-gaged in Allied Industries the Pay Roll Would Have Been Double That Sum Had We Produced Last Year All the Tin Plate We Purchased in Wales.

There were imported into the United States in the twelve months ending April 30 tin and terne plate to the amount of 422,284 net tons, having a

declared value of \$28,325,295. What would it mean to the United States if this tin plate were produced in this country instead of being im-

In the discussion of this question I shall use the best figures obtainable, and while they may not be absolutely accurate, they are approximately so, and near enough for all practical pur-

To produce this amount of tin plate would require, roughly, 550,000 tons of pig iron. But four states in the Union-Pennsylvania, Ohio, Alabama and Illinois-produced as much pig iron in 1890. This is equal to the average production of twenty modern blast furnaces working an average of three hundred days a year. It has been estimated that it requires, at a blast furnace, on an average, a day's work of a man to produce a ton of pig iron. It would require, therefore, to produce this amount of pig iron, 550,000 days' work constantly of one man at a furnace, or say, the work of 1,833 employes working 300 days in a year.

It requires two tons of iron ore to produce a ton of pig iron and for the fettling necessary in reducing a ton of pig iron to sheet. To produce this 550,-000 tons of pig iron that will be consumed in the production of the 432,284 tons of tinplate would require, therefore, 1,100,000 tons of iron ore. This is two and one-half times the product of all the iron mines of New Jersey; it is six times the product of the iron mines of Missouri. Taking the census of 1880 as a basis, it would seem that it requires a day's work to produce a ton of ore. Therefore, to produce the amount of ore necessary to make the amount of pig iron that would be used in the manufacture of the tinplate referred to would require 1,100,000 days' work of one man, equivalent to the work of

Assuming that it requires 1.2 tons of coke to make a ton of pig iron there would be a demand for 660,000 tons of coke. This is in excess of the production of every state in the Union except Pennsylvania, West Virginia and Alabama. To make this coke would require over a million tons of coal. To mine this coal and make this coke would require at least six hundred thousand days' labor of one man, or the labor of 2,000 men 300 days in a year.

3,366 men working 300 days in a year.

In addition to this there would be required for fuel in the sheet and tin mills over 1,500,000 tons of coal, or its fuel equivalent, equal to 750,000 days' labor of one man or the labor of 2,500 men 300 days in a year.

This 422,284 tons of tinplate would require say 400,000 tons of sheet iron or sheet steel. This is equal to nearly half the total production of sheet and plate iron and steel in the United States in 1890, and more than equal to the production of sheet iron and sheet steel of the guages that form the bulk used in the manufacture of tinplate.

It is difficult to arrive at just the labor in a ton of sheets, but it would be at least below the mark to assume that it requires four days' labor to produce from the pig iron a ton of sheet iron or (Kan.) Nationalist in reply to an in- sheet steel. This would be equivalent, then, to 1,600,000 days' labor in the sheet mill, or the labor of 5,333 men 300

tively how many persons would be employed in the actual tinning department of these works, but 3,500 men working 300 days in the year would probably be

Now, taking no account of the mer goats are separated at the last day. It engaged in the transportation of metals to their point of consumption, nor of the men engaged in producing the lumber or making the boxes to box this amount of tinplate, of which some eight million boxes would be required, we would have the following as the number of men working 300 days in the year that would be required to produce the materials named above necessary to make 422,284 net tons of tinplate:

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This is equivalent to 5,649,600 days labor. This, at an average of \$2.50 per day, would be equivalent to \$14,124,000 paid out in wages. The fact that the declared value of the amount of tinplate above named was \$28,325,295 will show that my estimate is probably far below the mark. I think it would be fair to assume that fully twenty thousand people would be given employment directly if the amount of tinplate named were made in this country, and more than four times this number of people given employment indirectly.

It would be useless to discuss the significance of these figures or to point out what it would mean to the furnace, ore, coal, coke and rolling mill indus tries to have the manufacture of tinplate established in this country, and to produce here the amount of product that was imported in the twelve months ending April 30, 1891. There is not an industry named to which the demand for its product that would come with the establishment of the tinplate industry would not mean vastly more than the tonnage demanded would imply. A demand for 550,000 tons of pig iron in addition to the present demand would be the turning point between prosperity and success. It is not the regular and constant demand for a product that determines its price and makes times good. It is the added and unusual or increased demand. This demand for 550,000 tons extra of pig iron would add to the price of every ton of pig iron made, and the same is true of coke and coal and sheet iron.

And it needs no words to tell what would be the effect on the labor of the country of a demand for nearly 6,000,000 days' labor at remunerative prices.—N.

## SWEDEN AND AUSTRALIA.

The Former Abandons Free Trade—The Latter Also Drifting to Protection. Even the few unimportant countries which follow England's example and cling to free trade are one by one deserting her. Sweden abandoned that policy a few years ago and began a system of moderate protection. After a three years' trial she finds the new policy has worked so well that she raises her tariff wall still higher. The following table gives some of the more important changes recommended to the

Swedish parliament by the tariff commission appointed for the purpose: 

the one English colony which copies the mother country's tariff system, is rapidly drifting to protection. The secretary of public works advertised for contracts to supply 175,000 tons of steel rails for proposed railroads in the colony. He has evidently become sick of allowing the deadly theory of buying where you can buy the cheapest to keep its rich stores of iron and coal hidden in the breast of mother earth, so he has stipulated that the steel rails which he pro poses to buy and lay through New South Wales shall be made in the colony, of native ore, with native coal and other necessary minerals, and the fuel must be of domestic production also. In short, he has inaugurated the most direct and radical protection for rail making, since he absolutely excludes foreign rails from the competi-tion. Those countries, like Ireland and India, which she holds to free trade against the will of their peoples, will before long be England's only compan-ions in Cobdenism.

## McKinley Prices on Carpets.

To the Editor of the Press:

SIR-A friend's wife went recently to eight carpet and dry goods stores in New York to buy ingrain and Brussels carpet, and was told at all of them that carpets are thirty to thirty-five per cent. higher now than one year ago, owing to the McKinley tariff. Is such an increase in price caused by the law named? You rememer what Tom Reed said last fall about women and the election. Respectfully, 84 Wayne street, Jersey City, June 28.

We shall call upon that staunch ally of free trade, the Dry Goods Economist, to reply to our correspondent. We have taken the prices published by it on April 5, 1890, six months before the new tariff took effect, and compared them with the prices of the identical grades of carpets which it published in its issue of June 20, 1891, eight months after the new law became operative:

PRICES OF CARPETS AS PUBLISHED IN "PRICES

Kinds of Carpets,	Prices atr	Prices now, eight months after new tariff.	Increas (*) decreases ()
SMITH, ALEX & SONS			
Axminster	81 80	81 45	-2)
Ex-Gobelin Moquette Moquette	1 65	1 30	-3
Extra Velvets		1 20	-
Extra Tapestry (10 wire		7714	•3
Best Tapestry		7214	*6
B Palisade Tapestry	60	60	
C Palisade Tapestry	55	55	333
F Palisade Tapesty	5234	5214	
BIGELOW CARPET CO.	-		
Wilton, 5 frame 1	., 9 1914	2 0716	-3
Wilton, 4 frame 4		2 00	-1
Wilton, 3 frame 4	1 92	1.90	-1
Brussels, 5 frame 🐒	1 20	1 17%	-3
Brussels, 4 frame 3	1 15	1 10	
Brussels, 3 frame 🦫	1 10	1 05	-5
Brussels Axminster	1 50	1 45	-814
These are the fir	st two	price	lists

days.

It is also very difficult to state positively how many persons would be emist, except that where two prices were named for any grade we took in each kinds of carpets mentioned only three have advanced in price since April, 1890. while four have not changed and nine are actually selling now from 1 to 20 per cent. lower than the prices of a year ago. We have not space to give the quotations of other houses complete, but going over their lists we find prices of ingrain and Brussels carpets as fol-

	Kinds of Carpets	non	- C	
	LOWELL MFG. CO	v. c	1100	ī
3	Super 3 ply 80 775		*3	ı
	Extra super 60	60	*****	r
1	Body Brussels, 5 frame 1 30	1 17%	-8	X.
1	Body Brussels, 4 frame., 1 15	1 12%	2	H
4	DELAWARE CARPET MILLS-	-		ı
1	Delaware Brussels, 5fr 1 00	1 10	*10	H
ij	Tacony Brussels 90	90		ı
3	Belmont Brussels 85	85		H
9	SANFORD, STEPHEN & SONS			п
ı	Double Ex. Tap Brussels. 70	70	******	H
ı	Extra Tap. Brussels 625	6914		Ð
	"Comet" Tap. Brussels. 55	5734	*5	l.
X	Asteroid Tan. Brussels. 524	55	*5	Г
ı	M. J. WHITTALK-			п
	Wiltons 1 90	******		Ł
1	Wiltons Stillw ter B s is 1 05	*******		ı
ij,	Wiltons Edgew'th B's is 05		******	ı.
ij	JOAN BROMLEY & SONS -			п
ii	Bromley Brussels 1 05	1 05		ti:
U	DOBSON, JOHN & JAMES-			ŧ.
N	Ingrain, 4 ply 82%	F5.	*3	H
	Body Brussels 1 05	1 10	*5	H
ı	WORCESTER MFG. CO			H
J	Brussels, 5 frame, 5 1 10	1 10		

Here we have six cases of increase. two of decrease and seven showing no change. The dealers who told the lady change. The dealers who told the lady referred to by our correspondent that prices had advanced from 30 to 35 per cent. were, without doubt, trying to deceive her. The changes that have taken place in the carpet market indicate no more than normal fluctuations in trade except so far as they have been caus by the increase that was made in the duties on carpet wools, and about which there was a good deal of difference of Even these duties, ho will probably operate as most other duties have in the past, to repeal them-selves in actual practice, by promoting larger domestic supply and lower prices. Prices in all lines of commerce are continually changing in obedience to the law of supply and demand and other influences, regardless of tariff rates. The slightest upward tendency that has appeared in any protected article since the passage of the new tariff law has the passage of the new tarif law has been eagerly pounced upon by the "reformer" and held up as proof of his absurd predictions that prices of all kinds of manufactures would be increased by the McKinley bill. But of late he has experienced the greatest difficulty in finding even isolated instances of advancing prices, for the simple reason that since the new measure was enacted the tendency for all

# FARM AND GARDEN.

TAPHRINA PRUNI.

Fungus Which Affect . Plum Trees and

We notice that a good many plums are attacked this year by a fungus, probably that known to science as Taphrina pruni. In all cases that we have noticed, the crop is not seriously injured, though in some localities and on certain trees it is much lessened. In our grove but one variety is attacked, a large, native yellow freestone plum. On several trees of this variety the loss will be about one-third.

Often one or more plums in a cluster will be attacked, and the rest of the cluster be entirely free from the dis-

The fungus affects the plum so as to make it swell to an enormous size, resembling in shape a large jointed red pepper pod. At first it is of a greenish yellow, becoming yellowish brown, ap-



FUNGUS ON THE PLUM.

pearing as if covered with mold, and later, before it shrivels or drops from the tree, a blackish brown.

The fruit is hollow, consisting only of the spongy distended skin, containwould have been the pit and pulp of the plum.

The disease does not appear to be more abundant the second or third year on trees that have previously been subject to it than on others, though from analogy we would suppose such to be the cas

Probably gathering the swollen fruit and destroying it before the spores ripen
—which is in central Iowa during the first two weeks of June-would be as effective a method as any that could be suggested. Where the trees are low this could be easily done, as the enormous puffy plums are very conspicuous.

The Taphrini pruni of Europe is said to attack the foliage as well as the fruit. This is not the case, however, with the fungus in question, only the fruit being affected.-Prairie Farmer.

# ABOUT UNDER DRAINAGE.

How to Preserve the Fertilizing Materi als in Rain and Snow There is more or less fertilizing ma-

terial in rain and snow. One of the principal advantages of under draining over surface drainage is, a much larger per cent, of fertilization is retained in the soil. With surface drainage a good portion of this is lost, while in hard beating rains not only is a large per ent of what is in the water carried off, but more or less what is already in the soil and near the surface is carried

With under drainage the water is strained through the soil and much of this matter is retained therein, a large per cent. of which is soluble, and ience available for use by the growing olants.

Of course much depends upon how the work is done. Improper drainage is of little or no advantage, and may be an injury rather than a benefit. The work should be carefully planned. One item of importance is to secure a good outlet for the mains. Then se cure a gradual fall, not only of the main drains, but also of the laterals. Put the tile at least three feet below the surface, and thus safe from frost Use good-sized drains. The difference in cost is a small item compared with the better and sure results secured. The difference in cost is only the difference in the price of the tiles, as the cost of laying is practically the same.

In August and September is a good time to dig the drains and lay the tile. There is usually time for this during these months. The soil is generally dry at this time, and while the digging may be somewhat harder the other advantages more than overbalance this.

A good way to begin is to drain the low places first, and then work back to the higher grounds; but whatever is done it will pay to take time and do the work thoroughly.-Prairie Farmer.

Quality Makes the Price.

Make it a point to have your poultry of the best quality before shipping to market. One who is not accustomed to visiting the large markets knows nothing of the enormous amount of inferior poultry that is sold, and which largely affects the prices; yet there is always a demand for that which is good, and at a price above the regular quotations. The assorting of the carcasses before shipping also leads to better prices. Old oysters (which seldom sell at more than half price) should not be in the same boxes or barrels with better stock; and to ship poultry alive, and have roosters in the coop with fat hens, is simply to lower the price of the hens, as the buyer will estimate the value by the presence of the inferior stock. In fact, never send any poultry to market unless in first-class condition, and under no circumstances ship the inferior with that which is better. - Farm and Fireside.

Selling Old Hens. If a hen is old, and has given a good record, do not condemn her too hastily. as sometimes a hen is serviceable until she is six or seven years old. The best guide is the time at which the hens begin to moult. If an old hen begins to moult in July, she will, in all probability, lay as well next winter as she did last. In selling old hens -elect those that are overfat and which have ceased to lay, but which show no signs of ure was enacted the tendency for all moulting. Those that are active and kinds of manufactured goods has been lay well may be better for next season decidedly downward.—N. Y. Press.

## FILTHY FACTORIES.

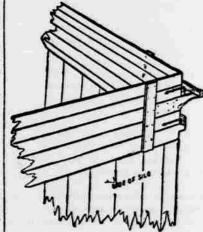
Public Dairies Are Frequently Conc on a Deplorable Basis-

"Dairymen should not take with illgrace criticisms upon lack of cleanliness of cans, milk, etc., when they maintain such object lessons as the average cheese factory. We long to see one, just one, model factory, whose floor is clean, whose walls are clean, whose windows are clean, and last, but not least, whose flies are strictly limited to the outside. It can be done." Another authority seconds this depre-cation, and adds: "There is much latent devilment lurking in the average whey vat." There are private dairies conducted upon strict principles of neatness; but I never saw a public one for which so much could be said. The floors of the milk room are usually of plank, laid on sleepers. Planks will dry, shrink and leave cracks; wash percolates through to rot and fester and send its exhalations back into the room to poison the milk and butter. If the floor be tight, filth gets into cracks between the planks, and then has the same effect. A grout floor is objectionable because it is absorbent.

A stone floor is better, provided "spilled milk" be at once wiped up. An earth floor is probably the best. Earth is absorbent: but it is also a purifier. All the wood work in milk and cheese rooms should have every crack filled with putty and be kept thickly painted. Whey decays and scents very quickly. If heated to one hundred and forty degrees and then cooled it will keep sweet several days. If there is any scent whatever about a creamery other than the natural smell of sweet milk, butter and cheese, there s something wrong, and the products of the factory will be affected. A microscope should be as much of a creamery implement as a thermometer If the attendants will scrape a little of ing but the shriveled remains of what the filth from seams or corners of milk and whey receptacles, or from the filthy floor, and apply the microscope test, the wriggling animal life brought to view will be a revelation and a potent incentive to cleanliness. It is reported by a local paper that some of the hog-pen adjuncts of creameries have been very properly abandoned. -Galen Wilson, in N. Y. Tribune.

#### SILOS STILL CHEAPER. They Are Now Within Reach of Even the Poorest sarmer.

How to cheapen the silo so it will be within reach of every farmer has long been a subject of thought. Wood has been proved better and cheaper than stone, and surface silos better than those underground, but a simple contrivance in use at Brightside farm, owned by W. H. Wilkinson, of Holyoke, Mass., can be made to lessen the cost still more. Ensilage settles nearly one-third after being put in. If a series of silos are to be built they may be of less depth if filling boards like those illustrated be used. They are merely side-boards to hold the ensilage while it is settling, and one set will



serve for several silos. They may be four feet wide or wider and as long as the silo's width. Handles should project at each end with which to them; also short bottom pieces. The handles and bottom projections should each have a staple properly set and clinched. Hooks, stapled to the side boards, hold in these and so bind the corner firm. When the ensilage has settled below them the hooks are loosened and the boards lifted one at a time by two men, and placed over another pit which has been filled meantime. They are merely rough boards cleated together and need not be air tight like the sides of the silo. - Holister Sage, in N. E. Homestead.

# TRAINING HEDGES.

A New Method That Is Meeting with Favor and Success Nothing is more attractive around a

place than a well-kept hedge. But there is no beauty in a hedge row unsightly and untrimmed, with part of it dead, other parts tall and ungainly. A new method of training hedges is meeting with favor and success in some parts of the country. The first step is to plow and manure the strip of ground heavily where the hedge is to be planted. Osage orange sprouts of a year's growth are then planted eight inches apart, and the ground kept mellow and free from weeds the first season. The next year the sprouts are braided on a flat sinuous iron fencing rod stretched horizontally about six inches from the ground. The next growth of sprouts of course grows straight up, and the second season another of the rods is fastened in the same way, and likewise the third. A hedge of this kind was planted three years ago in this place and now is complete, and a more beautiful fence would be hard to find. The growth is from the ground, and is compact clear to the top, and no animal can get through it or over it. It is wide at the base and slopes upward. An old hedge row running along the highway was cut down close to the ground, and the following season when the sprouts came up they were braided as described above. The sprouts from this old hedge grew seven feet in one season, of course making from the large mass of roots a much more rapid growth than those from the young cuttings, and producing a neat and attractive appearance. - American Agriculturist

Pacher's Castoria.